

**NVMTS2002 PROGRAM**

as of 21-Oct [CLICK ON TITLE FOR ABSTRACT](#)

NOTE: ORDER and TITLES of Presentations *Subject to Change*

MONDAY Nov 4	
6PM to 8PM	Registration Reception Hibiscus Suite

TUESDAY Nov 5		
	8:45 AM	Introduction & Welcoming Remarks
[1]	9:00 AM	<b>Keynote Address: The Missions of the Jet Propulsion Laboratory;</b> David Crisp, Jet Propulsion Laboratory
		<b>Applications</b> K Clark, Jet Propulsion Laboratory, <i>Chair</i>
[2]	9:40 AM	<u>The Future of NonVolatile Memories;</u> T. Mikolajick, Infineon
[3]	10:05 AM	<u>System and Economic Requirements for Advanced Non-Volatile Memories;</u> R. Andrei, Web-Feet Research
	10:30 AM	BREAK
[4]	10:45 AM	<u>Embedded Memory Technologies - the First Step Towards SoC;</u> R. Andrei, Web-Feet Research
[5]	11:10 AM	<u>Rugged &amp; Reliable Data Storage: Choosing the Right Media for Rugged COTS Mass Data Storage;</u> O. Tzur, M-Systems
[6]	11:35 AM	<u>High Speed, Radiation Hard MRAM Buffer;</u> R. Sinclair, NVE Corp.
	12:00 PM	LUNCH
[7]	1:00 PM	<b>Invited Talk: Remembering the Past from the Depths of Space;</b> K. Clark, Jet Propulsion Laboratory
		<b>INNOVATIVE CONCEPTS</b> J Zhu, Carnegie-Mellon University, <i>Chair</i>
[8]	1:40 PM	<u>Compact Holographic Memory Using E-O Beam Steering Technology;</u> T-H Chao, Jet Propulsion Laboratory
[9]	2:05 PM	<u>High Performance Organic Non-Volatile Memory Device ---a Direct Challenge to the Si Technology;</u> Y. Yang, University of California at Los Angeles
	2:30 PM	BREAK
[10]	2:45 PM	<u>The Transpinner®: An Active Spin-Based Device;</u> E. Torok, Integrated Magnetoelectronics
[11]	3:10 PM	<u>Static FRAM: A Novel Ferroelectric Memory Approach;</u> J. Evans, Radiant Technology
[12]	3:35 PM	<u>Enabling MLC NAND Flash for Cost-Effective, High Capacity Data Storage;</u> R. Dan, M-Systems
		<b>SPECIAL SESSION: The (New) Flash Phenomenon: Sporadic Extraneous Programming;</b> K Strauss, JPL, <i>Chair</i>
[13]	4:00 PM	Invited Talk: Inadvertently Programmed Bits in Samsung 128 Mbit Flash Devices - A Flaky Investigation; G. Swift, JPL
[14]	4:25 PM	Invited Talk: Description and Reliability of a Robust 0.18 micron Low Voltage and Low Power Embedded Flash Technology; A. Khan, Philips Semiconductor
	4:50 PM	End of Day
	5:00 - 7 PM	Evening Reception, Hibiscus Suite

WEDNESDAY Nov 6		
	8:30 AM	Reconvening Remarks
[15]	8:45 AM	<b>Invited Talk: Utilization of Advanced Microelectronics in Space Applications;</b> S. Kayali, Jet Propulsion Laboratory
		<b>Environment, Reliability, and Modeling</b> K Hunt, AFRL, <i>Chair</i>
[16]	9:25 AM	Reliability and Endurance of FRAM: A case study; J. Namkung, JPL
[17]	9:50 AM	<u>Evaluation of Data Retention and Imprint Characteristics of FRAMs Under Environmental Stresses for NASA Applications;</u> A. Sharma, Goddard Space Flight Center
[18]	10:15 AM	<u>Tunneling Phenomenon in SuperFlash® Cell;</u> A. Kotov, Silicon Storage Technology
	10:40 AM	BREAK
[19]	10:55 AM	<u>Radiation Testing of EEPROM Embedded in a 3 GHz Phase Locked Loop;</u> M. Burgener, Peregrine Semiconductor
[20]	11:20 AM	<u>Single Event Effect and Total Ionizing Dose Response of Emerging Non-Volatile Memories;</u> D. Nguyen, Jet Propulsion Laboratory
[21]	11:45 AM	<u>Single Event Effect Evaluation of FeRAM Memories for Space Applications;</u> L. Scheick, Jet Propulsion Laboratory
	12:10 PM	LUNCH
[22]	1:10 PM	<b>Invited Talk: Non-Volatile Parameters - The Good, The Bad, The Ugly;</b> K. Hunt, AFRL
		<b>EMERGING TECHNOLOGIES</b> G Derbenwick, Celis Semiconductor, <i>Chair</i>
[23]	1:50 PM	<u>Integration and Circuit Demonstration of Chalcogenide Memory Elements with a Radiation Hardened CMOS Technology;</u> J. Rodgers, BAE Systems
[24]	2:15 PM	<u>Low Power 256K MRAM Design;</u> R. Beech, NVE Corp.
	2:40 PM	BREAK
[25]	2:55 PM	<u>MRAM Design Limitations Dictated by Thermally Activated Reversal;</u> J. Zhu, Carnegie Mellon University
[26]	3:20 PM	<u>Reproducible Electric-Pulse Induced Resistive (EPIR) Switch Effect of Manganite Films for Non-Volatile Memory Applications;</u> A. Ignatiev, University of Houston
[27]	3:45 PM	<u>High Density NDRO Ferroelectric Memory;</u> D. Kamp, Celis Semiconductor
[28]	4:10 PM	<u>Nonvolatile and SDRAM Ferroelectric Memories for Space Applications;</u> D. Kamp, Celis Semiconductor
[29]	4:35 PM	<u>FRAM: Advanced Feature Set Pulls the Technology into the High Density Domain;</u> T. Davenport, Ramtron
	5:00 PM	END of SYMPOSIUM